

**Amendments to the Specification**

Please replace the paragraph at page 9, lines 22-31 with the following amended paragraph:

Substituting Eqs. 3 and 6 into Eq. 7 yields,

$$f = E \left[ \left( (\alpha - \alpha^*)R + (\beta - \beta^*)G + (\gamma - \gamma^*)B + \alpha N_R + \beta N_G + \gamma N_B \right)^2 \right] \quad (8)$$

$$\begin{aligned} &= (\alpha - \alpha^*)^2 E[R^2] + (\beta - \beta^*)^2 E[G^2] + (\gamma - \gamma^*)^2 E[B^2] \\ &+ 2(\alpha - \alpha^*)(\beta - \beta^*)E[RG] + 2(\beta - \beta^*)(\gamma - \gamma^*)E[GB] \\ &+ 2(\gamma - \gamma^*)(\alpha - \alpha^*)E[BR] + \alpha^2 \sigma_R^2 + \beta^2 \sigma_G^2 + \gamma^2 \sigma_B^2 \end{aligned} \quad (9)$$

where,  $\sigma_R$ ,  $\sigma_G$  and  $\sigma_B$  are estimated standard deviations of noise values  $N_R$ ,  $N_G$  and  $N_B$  respectively.